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April 10, 2015

VIA ELECTRONIC AND U.S. MAIL

Ms. Caroline Kwan
Remedial Project Manager
Special Projects Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region 2
290 Broadway, 20th Floor
New York, New York 10007-1866

Re: Progress Report No. 45 – March 2015
Newtown Creek Remedial Investigation/Feasibility Study

Dear Ms. Kwan:

Anchor QEA is submitting this monthly progress report (MPR) for the Newtown Creek Remedial Investigation/Feasibility Study (RI/FS) on behalf of the Newtown Creek Group (NCG) Respondents to the Administrative Settlement Agreement and Order on Consent (Settlement Agreement or AOC). As set forth in Section 42 of said Settlement Agreement, this progress report is divided into the following areas:

1. Actions taken to comply with the Settlement Agreement during the previous month
2. Results of sampling and tests and all other data received by Respondents to the Settlement Agreement during the previous month
3. Problems encountered and anticipated problems, actual or anticipated delays, and solutions developed and implemented to address actual or anticipated problems or delays
4. Work planned for the next 2 months with schedules relating to the overall project schedule for RI/FS completion

1. Actions Taken to Comply with Settlement Agreement during Previous Month

- A monthly update meeting was held with USEPA in New York City on March 5. Topics discussed during this meeting included the following: 1) Phase 2 field program update; 2) point sources sampling update; and 3) project schedule status.
- Additional comments on the preliminary Phase 2 Remedial Investigation (RI) data release schedule were provided by USEPA via e-mail on March 11. Responses to these comments were provided to USEPA via e-mail on April 1.
- An e-mail necessitating the NCG to re-install the five groundwater monitoring wells that were lost or damaged by ice was provided by USEPA on March 18.
- The *Phase 2 RI Field Program – QAPP/FSAP Deviation Memorandum No. 8*, which describes minor field deviations including subsurface deviations identified during the core log quality control (QC) process, sediment trap access issues, and a Field Sampling and Analysis Plan (FSAP) deviation for the modification of a few point sources sampling locations, was submitted to USEPA on March 23. USEPA approved the deviation memorandum on March 25.
- A formal request for the extension of the Phase 2 field program beyond the originally planned March 31, 2015 end date (due to delays on the point sources and groundwater programs) was submitted to USEPA on March 31. The status of the field program will be re-assessed in mid-June.
- The Phase 2 field investigation continued in March. Specifically, the following activities were performed:
 - Acoustic Doppler current profilers (ADCPs) and sondes retrieval, cleaning, and redeployment (week of March 2)
 - East River surface water sampling (week of March 9)
 - Point sources sampling event (March 14)
 - Samples were successfully collected at four locations: NCQ-637, NCB-629, BB-610, and O-135
 - Samples were not collected from three locations due to low or no flow: NCB-432, O-55, and NG-001
 - Surface water during point source discharge samples were successfully collected from 18 locations
 - Sediment traps retrieved (week of March 23)

- Point sources reconnaissance visits at the NCB-083 location (March 26) and the Meeker Avenue overland flow location (March 31)
- Several teleconferences between Anchor QEA, USEPA, and the City of New York were held in March to discuss various point sources sampling issues, including low flow sampling methods, mobilization protocols, and dissolved/particulate analyses.
- *Modeling Approach Memorandum (2)* revisions continued in March.
- Phase 2 field program planning and implementation continued in March.

2. *Results of Sampling and Tests and Other Data Received by NCG Respondents during Previous Month*

- QC review of field data from the East River surface water sampling (Event 10), surface water during point source discharges (Event 2), and point sources sampling (Event 4) was completed. The field data for these events are included on the enclosed compact disc (CD) as part of this MPR.
- Core logs and field photographs from the subsurface sediment and groundwater sampling programs were completed and transmitted to USEPA on March 4, March 23, and March 30. This information is also included on the enclosed CD as part of this MPR.
- Validated chemistry data from the December 2014 wet-weather point sources sampling event, as well as laboratory and data validation reports for the City of New York-owned locations, are included on the enclosed CD as part of this MPR.
- Data validation and QC review of the Phase 2 subsurface sediment chemistry data (except for radiochemistry and groundwater-related samples) were completed and are provided on the enclosed CD as part of this MPR.

3. *Encountered and Anticipated Problems and/or Delays and Solutions Developed and Implemented to Address Them*

- Five groundwater monitoring wells in the tributaries of the creek were damaged by ice this past winter. The current schedule is to replace these damaged monitoring wells and re-start the potentiometric surface data collection the week of April 13.

- The NCG has requested information from the City of New York that is needed to complete the RI/FS. An updated listing of these requests is provided as an attachment to this MPR.

4. Work Planned for the Next 2 Months with Schedules Relating to the Overall Project Schedule for RI/FS Completion

- Project update meetings with USEPA are scheduled for April 15 and May 14.
- Continue the Phase 2 field investigation in April and May, including the following:
 - ADCPs and sondes retrieval, cleaning, and redeployment
 - Groundwater program activities, including seepage meters and potentiometric data collection, dependent on field and weather conditions
 - Point sources sampling can now be conducted at locations with low flow discharges using the revised USEPA-approved equipment and protocols.
 - Point sources sampling at locations that have not been sampled yet (NCB-083, BB-009, Queens District 5/5a Garage [*Data Applicability Report* (DAR) No. 45], NCQ-029, NCB-631, O-185, Review Avenue Development I [DAR No. 41], Maspeth Concrete Loading Corp. – Metropolitan Avenue [DAR No. 210]) will be prioritized over locations that have already been sampled.
 - Sampling at O-55 (Empire Merchants/Former Paragon Oil Terminal) and NG-001 (Greenpoint Energy Center) is on hold pending determination of whether there is a feasible alternate sampling location. Samples could not be collected at the designated sampling locations during the March 14 event due to insufficient flow.
 - Point sources sample locations at the following New York City Department of Environmental Protection (NYCDEP) sampling locations will be sampled after the following issues are resolved:
 - Per USEPA's decision, combined sewer overflow locations (NCB-015, NCQ-077, BB-026, and NCB-022) and the Whale Creek overflow NCB-002 will not be sampled a second time until a decision is made about dissolved/particulate sampling.
 - NCQ-637 will not be sampled until additional traffic control/safety measures can be implemented. Observations in the field during the March 14 sampling event indicate that additional traffic control measures are necessary.

- NCQ-029 will not be sampled until the NYCDEP-required wet-weather reconnaissance is conducted at this location.
- Sampling at Meeker Avenue is on hold pending direction from USEPA on whether samples should be collected from the adjacent manhole or catch basin when discharge does not occur as overland flow.
- Sampling at Waste Management of NY/Steel Equities (formerly Pratt Oil Works [POW]; DAR No. 56)/Town, County and State Recycling, Inc. (aka Review Avenue Recycling, Inc.; DAR No. 145) is on hold until construction and stormwater improvements are complete.

If you have any questions regarding this progress report, please do not hesitate to contact me at (201) 571-0912 (e-mail: jquadrini@anchorqea.com).

Sincerely,



Jim Quadrini, P.E., BCEE
Anchor QEA, LLC

Attachments

- CD containing field data and validated Phase 2 chemistry data
- An updated New York City Data Request listing

cc: Joseph Battipaglia, USEPA Region 2 Co-Remedial Project Manager
Michael Mintzer, USEPA Region 2 Assistant Regional Counsel
Ian Beilby, NYSDEC, Division of Environmental Remediation
W. David Bridgers, Common Counsel for Newtown Creek Group Respondents
Edward Leonard, CDM Smith

New York City Data Request

| Item No. | Date Requested | Information Needed | Information Type (Data, Document, Model) | NYC Response, 3/27/2014 | NYC Response, 2/3/2015 | Status as of 4/9/2015 | Reason for Request |
|----------|------------------------|--|--|---|---|---|--|
| 1 | 9/10/2012 ¹ | Data from monitored/telemetered combined sewer infrastructure that discharges to Newtown Creek, including NCB-015 | Data | As we have explained in response to prior requests, this program has not been completed, therefore data is not available. | The monitoring program will not be completed until at least April 2015, followed by validation. | NYC will provide these data with the flow meter study in the summer of 2015. NYC indicated this information would be provided by August 15, 2015. Can NYC clarify the dates of flow metering and telemetry information that this report will include? | This information is required to evaluate combined sewer discharges to the creek and support the modeling effort. |
| 2 | 9/10/2012 ¹ | Data and reports that are associated with the PCB and mercury studies and minimization program (including analytical data for PCB Aroclors, individual PCB congeners, and total PCBs; total mercury; and daily flow on the day the samples were taken), as required by Newtown Creek WPCP SPDES Permit No. NY0026204 (2010) and Bowery Bay WPCP SPDES Permit No. NY0026158 (2010; NC WPCP Permit Section XIV.j,k; BB WPCP Permit Section XV.f,g,h) | Data Document | In progress | We anticipate we can provide this by mid-February. | USEPA requested specific information about how the data will be used. This information was provided on March 25, 2015. USEPA response is pending. | This information is required to evaluate combined sewer discharges to the creek and develop the CSM. Data will be used in combination with data collected during the Phase 2 sampling effort in order to support estimates of loadings from CSOs needed for the sediment transport and chemical fate and transport modeling efforts. |
| 5 | 9/10/2012 ¹ | a. Available CSO/SSO flow monitoring data, along with data used in the modeling for the Long-term Control Plan (including flow data for BB-026 and any additional locations that discharge to Newtown Creek that are available) b. A status update on NYC CSO flow metering program and a detailed schedule for completion of activities and transfer of data | Data | In progress | This is the same request as #1 and the response is the same. | NYC will provide these data with the flow meter study in the summer of 2015. NYC indicated this information would be provided by August 15, 2015. Can NYC clarify the dates of flow metering and telemetry information that this report will include? | This information is required for model calibration—flow data will be used in conjunction with other variables to evaluate hydro model performance. Flow data will also be used to inform the sampling effort and approach. |
| 7 | 9/10/2012 ¹ | NYCDEP Shoreline Survey Reports for Newtown Creek and Bowery Bay Sewersheds (required to be submitted to NYSDEC on April 1, 2013), including the basis of the outfall categories (e.g., storm drain and direct discharge) and documentation of dry-weather discharge monitoring and investigations, as required by Newtown Creek WPCP SPDES Permit No. NY0026204 (2010) and Bowery Bay WPCP SPDES Permit No. NY0026158 (2010; NC WPCP Permit Section XIV.c; BB WPCP Permit Section XV.c) | Data Document | We have this document and will send it on a CD next week. | The request for GIS is a new request from NCG. DEP is following up with staff on this request. | Complete. Anchor QEA is reviewing this information. | This information is required for the development of the CSM. Specifically, it is required for the point sources inventory reconciliation process (NYCDEP survey information presented in the SSAM is based on complete surveys from 2003 and a partial survey from 2008), the evaluation of point source discharges to the creek, and groundwater infiltration to storm and sewer lines. |

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| 9 | 9/10/2012 ¹ | URS Company, 1986. <i>Infiltration/Inflow Analysis, Bowery Bay WPCP</i> ; Task 1. Prepared for New York City Department of Environmental Protection as part of Flushing Bay Water Quality Facility Plan. September 1986. (including the appendices and supporting maps) | Document | In progress | Unavailable. We have been unable to locate a copy of this report from 1986. | NYC was not able to locate this document. | This information is required to evaluate groundwater infiltration to storm and sewer pipes and for the development of the CSM. |
| 10 | 2/24/2014 | Electronic files for data cited in the <i>Newtown Creek and Whale Creek Canal Maintenance Dredging Analytical Report and Sediment Sampling and Analysis Plan</i> (September 2013) including bathymetric survey, sediment, water, and air data | Data | We have this document and will send it on a CD next week. | We anticipate we can provide this by mid-February. | Complete. Anchor QEA is reviewing this information. | This information is required to characterize the nature and extent of contamination in the creek and its tributaries. |
| 11 | 2/24/2014 | Information and data required by Newtown Creek WPCP SPDES Permit No. NY0026204 (2010) and Bowery Bay WPCP SPDES Permit No. NY0026158 (2010; NC WPCP Permit Section XIV.h; BB WPCP Permit Section XV.h)., including the inventory of industrial facilities that discharge to MS4 pipes and monitoring data | Data Document | In progress | As the City has previously explained, there are no industrial facilities under the IPP that discharge to any MS4 pipes in the Newtown Creek or Bowery Bay drainage areas. We anticipate we can provide the most recent progress report by mid-February. | Not provided. A progress report from 2003 and inventories from 2006 and 2009 were provided. NYC is required to make these inventories every 3 years, so there should be one for 2012. NYC indicated on March 5, 2015 that a more recent report has not been prepared. | This information and data are required to evaluate stormwater discharges to the creek and for the development of the CSM. |
| 12 | 2/24/2014 | a. Complete results of hydrographic surveys, including survey reports and survey results in electronic format, performed in October and November 1991 by Hartman Associates, Inc., for the U.S. Army Corps of Engineers and in June of 1999 by HydroData and referenced in the <i>Newtown Creek Water Quality Facility Planning Project Dredging Feasibility Study</i> (September 2000), prepared for NYCDEP by URS Greiner Woodward Clyde, Inc. b. <i>Newtown Creek Water Quality Facility Planning Project, Sediment Sampling and Analysis</i> (2000), prepared by Lawler, Matusky, and Skelly Engineers, LLP (under subcontract to URS Greiner Woodward Clyde, Inc.) and prepared for NYCDEP | Data Document | In progress | (a) complete as of January 31, 2015. (b) We are following up on this request. Please clarify what else, if anything, is considered outstanding. | The 1991 hydrographic survey was provided on March 6, 2015. The part B report is referenced in the <i>Newtown Creek Water Quality Facility Planning Project Dredging Feasibility Study</i> (September 2000) report. The dredging FS states that 21 sediment cores were collected in November 1999 and states that boring logs are included in Appendix C. However, the boring logs are not included, and only summary tables of data are included in the FS. Are the report and data available electronically? | This is required to develop the CSM and support interpretation of the Phases 1 and 2 data. |

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| 13 | 2/24/2014 | Complete results of hydrographic survey, including survey reports and survey results in electronic format for survey shown on Capital Project WP-169 English Kills Enhanced Aeration Zone 2 Contract CSO-NC-2 aeration system plans attached to Aeration System Permit (NAN-2011-00680) | Data Document | We have this preconstruction survey and will send it on a CD next week. We will send the postconstruction survey when it becomes available. | We anticipate we can provide this by mid-February. | Complete. Anchor QEA is reviewing this information. | This information is required to characterize the creek bed and support creek bed stability evaluations. |
| 14 | 2/24/2014 | a. Results of 2010, 2011, 2012, and 2013 annual priority pollutant scans of samples collected from the Newtown Creek WPCP and Bowery Bay WPCP influent and the Newtown Creek WPCP effluent, as required by Newtown Creek WPCP SPDES Permit No. NY0026204 (2010) and Bowery Bay WPCP SPDES Permit No. NY0026158 (2010); also subsequent HIM program data, as required by Newtown Creek WPCP SPDES Permit No. NY0026204 (2010; NC WPCP Permit Section XIV.f; BB WPCP Permit Section XV.f) b. Data referred to in the June 13, 2013 Municipal Fact Sheet for the Newtown Creek Wastewater Treatment Plant, including data provided to NYSDEC as part of the SPDES NY-2A permit application and sampling data provided to NYSDEC on May 11, 2011, and subsequent sampling data from April 30, 2012, and June 28, 2012 c. Specific information (including the point in the treatment process and the configuration of infrastructure) about the locations where these influent and effluent samples were/are collected at the Newtown Creek WPCP and influent samples are collected at the Bowery Bay WPCP | Data | In progress | We anticipate we can provide this by mid-February. | USEPA requested specific information about how the data will be used. This information was provided on March 25, 2015. USEPA response is pending. | This information is required to evaluate combined sewer discharges to the creek and develop the CSM. Data will be used in combination with data collected during the Phase 2 sampling effort in order to support estimates of loadings from CSOs needed for the sediment transport and chemical fate and transport modeling efforts. |
| 15 | 2/24/2014 | a. Daily TSS and flow measurements required by Newtown Creek WPCP SPDES Permit No. NY0026204 (2010) and Bowery Bay WPCP SPDES Permit No. NY0026158 (2010; NC WPCP Permit Section IV; BB WPCP Permit Section IV) b. All historical TSS and flow data for the Newtown Creek WPCP and Bowery Bay WPCP c. Specific information (including the point in the treatment process and the configuration of infrastructure) about the locations where these TSS and flow measurements-were/are collected at the Newtown Creek WPCP and at the Bowery Bay WPCP | Data | In progress | The City will aim to provide an update on this item later this week. | USEPA requested specific information about how the data will be used. This information was provided on March 25, 2015. USEPA response is pending. | This information is required to evaluate combined sewer discharges to the creek and develop the CSM. Data will be used in combination with data collected during the Phase 2 sampling effort in order to support estimates of loadings from CSOs needed for the sediment transport and chemical fate and transport modeling efforts. |

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| 18 | 2/24/2014 | TSS concentration data (surface and bottom) collected at NYC Water Quality Station E2 (located in East River near Newtown Creek) for the following years: 2003, 2004, 2005, 2006, 2007 and 2012; these data are not available via downloading from an NYC website. NYC presented temporal plots of TSS concentration data collected at Station E2 for 2005 through 2012 in Attachment C of NYCDEP Comments to the <i>Phase 2 Remedial Investigation Work Plan – Volume 1</i> (January 29, 2014). | Data | We have this data and will send it on a CD next week. | Complete. This data set has been provided in full. | Complete. Anchor QEA is reviewing this information. | This information is needed to help understand the potential transfer of solids between the creek and the East River and to support sediment transport modeling for the Study Area. |
| 19 | 2/24/2014 | Copies of the following reports, as well as data presented in them: – URS Corporation 2008 – Habitat Monitoring Work Plan, English Kills Aeration Facility – URS Corporation 2008 – Habitat Monitoring Data Summary Report, Pre-Operational Conditions, English Kills Aeration Facility – URS Corporation 2009 – Habitat Monitoring Data Summary Report, Post-Operational-Year 1 Conditions, English Kills Aeration Facility – URS Corporation 2010 – Habitat Monitoring Data Summary Report, Post-Operational-Year 2 Conditions, English Kills Aeration Facility | Data Document | In progress | We are following up on this request for data and will provide an update shortly. | Complete. Anchor QEA is reviewing this information. | This information is required to support the understanding of the benthic community and the influences on it and is needed to develop the CSM and support interpretation of the Phases 1 and 2 data. |
| 20 | 12/22/2014 | During the USEPA conference call conducted on December 22, 2014, the NYCDEP committed to providing the following information and data to the NCG and USEPA: 1) a technical memorandum that explains the methodology used to calculate the Whale Creek discharges on a 1-hour frequency; 2) estimates of Whale Creek discharges on a 1-hour frequency for 1992 through 2007, 2013, and 2014; 3) temperature, salinity, and TSS concentration data collected at Station E2 for 2014; and 4) 1999 bathymetry data for East Branch and Maspeth Creek to the NCG. Note that NYCDEP provided 1999 bathymetry data for English Kills to the NCG on October 1, 2014, but they have not fulfilled the original request, which included the bathymetry data for East Branch and Maspeth Creek. The NCG needs to receive all of this information and data from NYCDEP by March 1, 2015. Failure by NYCDEP to provide this information and data by this date will cause delays in the Phase 2 modeling work and negatively impact the project schedule. | Data Document | N/A | This is a new request. The City has provided some of this data and will make efforts to provide the remainder by March 1, 2015. | Whale Creek flows data from 1992 to 1999 are still outstanding. | This information is required to support the hydrodynamic and sediment transport modeling effort. |

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| 21 | 2/19/2015 | Records related to groundwater seepage or withdrawals in the Newtown Creek Watershed associated with New York City infrastructure; categories include the following: <ul style="list-style-type: none">– Dewatering of the subway system– Groundwater seepage into CSOs– Other groundwater dewatering | Data Document | N/A | N/A | Not provided. CDM Smith also requested this information. | This information is required to support the groundwater evaluation. |

New York City Data Request

- Notes:
- 1 = In some cases, the request has been updated to be more specific or include more recent information that became available since the previous request.
 - BB = Bowery Bay
 - BMP = best management practice
 - CAG = Community Advisory Group
 - CD = compact disc
 - CSM = conceptual site model
 - CSO = combined sewer overflow
 - FS = Feasibility Study
 - GIS = Geographic Information System
 - HIM = high intensity monitoring
 - MS4 = municipal separate storm sewer system
 - N/A = not applicable
 - NC = Newtown Creek
 - NCB = Newtown Creek Brooklyn
 - NYC = New York City
 - NYCDEP or DEP = New York City Department of Environmental Protection
 - NYSDEC = New York State Department of Environmental Conservation
 - PCB = polychlorinated biphenyl
 - SPDES = State Pollutant Discharge Elimination System
 - SSAM = Sources Sampling Approach Memorandum
 - SSO = sanitary sewer overflow
 - TSS = total suspended solids
 - USEPA = U.S. Environmental Protection Agency
 - WPCP = Water Pollution Control Plant